AUTHOR INDEX VOLUME 32

Abdel-Kereim, M.A. 87.
Adair, R. 301.
Allen, W.E. 221.
Almeida, I.L., Jr. 987.
Althouse, G.C. 779.
Altschul, M. 401.
Avery, B. 139.

Bak, A. 139.
Balise, J.J. 835.
Ball, B.A. 401.
Ball, L. 717.
Bartke, A. 255.
Beeman, K.B. 467.
Bell, K. 285.
Berardinelli, J.G. 301.
Berger, T. 69.
Beverly, J.R. 893.
Bird, J.M. 227.
Blackshaw, A.W. 1.
Blanchard, T.L. 515, 527.
Bluntzer, J.S. 893.
Borelli, C.L. 603.
Bosu, W.T.K. 277.
Bowen, J.M. 263.
Brackett, B.G. 413.
Brand, A. 845.
Brem, G. 159.
Bretzlaff, K.N. 501.
Brinsko, S.P. 527.
Byrd, W.H. 755.

Cabaniss, D.C. 413.
Callanan, T. 385.
Cameron, R.D.A. 1.
Carey, S. 227.
Caruolo, E.V. 55.
Chen, C.Y. 537.
Chenoweth, P.J. 705, 717.
Chow, P. 455.
Clement-Sengewald, A. 159.
Collas, P. 835.
Conley, H.H. 243.
Cooke, R.G. 311, 1007.
Cromwell, G.L. 577.
Cruickshank, G.W. 323.
Cullen, W.C. 485.
Cummings, E. 277.
Curl, J. 255.

Daley, C.A. 603.
Daniel, R.C.W. 507.
Davis, G. 475.
Davis, J.L. 643.
Denbow, D.M. 315.
Didion, B.A. 929.
Diehl, J.R. 11.
Dinger, J.E. 675.
Downey, B.R. 445.
Duchateau, A. 745.
Dunnington, E.A. 315.
Duschinski, U. 767.

East, N.E. 921.
Echternkamp, S.E. 131.
Edgerton, L.A. 577.
Eiler, H. 485, 755.
El-Oksh, H.A. 87.
Elmore, R.G. 501.
Entwistle, K.W. 171.
Evans, J.W. 27, 779, 961.
Evans, L.E. 779, 961.
Ezinma, C.O. 901.

Farin, P.W. 705, 717.
Fayrer-Hosken, R.A. 413.
Fennessey, P.F. 877.
Field, R.W. 501.
Fisher, M.W. 877.
Fitzgerald, J.A. 995.
Flood, M.R. 37.
Fogarty, R.M. 1.
Forrest, D.W. 893.
Freeman, K.P. 401.

Galina, C.S. 745.
Gaon, D. 79.
Garg, D.N. 683.
Gerlach, R.A. 705.
Gilbert, R.O. 451, 805.
Ginther, O.J. 197, 787.
Glickstein, L. 343.
Goddard, P.J. 221.
Godfrey, R.W. 939.
Gombe, S. 545.
Gonzalez, A. 557.

Goode, L. 55.
Goubau, S. 557.
Graves-Hoagland, R.L. 675.
Gremillion-Smith, C. 255.
Grunert, E. 205.
Guimaraes, S.E.F. 987.
Gustafsson, B.K. 493, 537.
Guthrie, M.J. 939.
Gwazdauskas, F.C. 963.

Haibel, G.K. 827, 863.
Hallford, D.M. 45, 149.
Hamadeh, S.K. 149.
Hammitt, D.G. 359, 369, 385.
Harder, J.D. 817.
Harms, P.G. 27, 893.
Harper, K.H. 413
Harvey, R.W. 55.
Hawk, H.W. 243.
Hayashi, S. 123.
Hayes, S.H. 871.
Kazeleger, W. 727.
Hernandez-Ledezma, J.J. 735.
Hillman, R.B. 401.
Hinrichs, K. 913.
Hirano, S. 123.
Hoagland, T.A. 675.
Hoedemaker, M. 653.
Hofmann, G.A. 835.
Holtz, W. 439.
Homeida, A.M. 1007.
Honda, A. 123.
Hopkins, F.M. 485, 755.
Hopkins, S.M. 779, 961.
Houghton, J.A. 227.
Houmard, B.S. 817.
Houpt, K.A. 343.
Hulet, C.V. 149, 315.
Hussain, A.M. 507.

Iwasaki, S. 569.

Jackson, L.L. 779.
Jacobs, A.L. 871.
Jenkins, W.L. 27.
Johnson, R.K. 105.
Johnson, L. 527.
Johnson, B.H. 885.

Kanagawa, H. 211.
Kanitz, W. 767.
Kapoor, P.K. 683.
Kappes, S.M. 131.
Kastelic, J.P. 787.
Katska, L. 767.
Kauffold, P. 767.
Keefer, C.L. 413.
Kinder, J.E. 105.
Kiracofe, G.H. 467.
Kirk, T.A. 315.
Kittok, R.J. 105.
Knopf, L. 787.
Ko, C.H. 493.
Ko, J.C.H. 537, 643, 779, 961.
Kobayashi, K. 123.
Kono, T. 569.
Krisher, R.L. 885.
Kubiak, J.R. 27.

Laarveld, B. 557.
Lampe, R.J. 797.
Lessard, P.N. 363.
Ley, W.B. 263.
Lidl, G.M. 827.
Lindsey, B.R. 95.
Liptrap, R.M. 79, 277.
Lock, T.F. 643.
Lofstedt, R.M. 607.
Long, C.R. 893.
Lopate, C. 585.
Lopez-Gatius, F. 185.

Mackintosh, C.G. 877.
Mahajan, S.K. 683.
Manik, R.S. 979.
Mann, D.L. 55.
Mapletoft, R.J. 557.
Markert, C.L. 929.
Marques, A.P., Jr. 653.
Martin, P.A. 359, 369, 385.
Martin, M.J. 929.
Massey, J.M. 95.
Maurer, R.R 131.
McBride, C.E. 413.

McCann, M.A. 55.
McCool, C.J. 171, 285.
McCosker, T.H. 285.
McGilliard, M.L. 693.
McGuire, W.J. 467.
McKenna, D.J. 493, 537.
McVey, W.R., Jr. 969.
Mendoza, G. 455.
Meunier-Salaun, M.C. 949.
Meyer, H.H.D. 545.
Meyer, P.J. 515.
Meyers, S.A. 515, 527.
Mikich, A.B. 987.
Mizuno, J. 123.
Momont, H.W. 19.
Munyua, S.J.M. 351.
Murphy, B.D. 557.
Mutayoba, B.M. 545.

Nagai, J. 475.
Nagao, Y. 211.
Nakahara, T. 569.
Nakao, T. 205.
Neuendorff, D.A. 939.
Newby, T.J. 11.
Nielen, M. 845.
Nonaka, K. 475.
Nwakalor, L.N. 901.

O'Boyle, D. 507.
Ohtubo, Y. 123.
Orihuela, A. 745.
Osaso, J. 545.
Ottobre, J.S. 817.

Pajsak, Z. 335.
Panangala, V.S. 633.
Parker, C.F. 995.
Parton, G.A.J. 323.
Penhale, J. 351.
Perkins, N.R. 827, 863.
Peter, A.T. 277.
Petters, R.M. 885.
Pexton, J.E. 705, 717.
Pierson, R.A. 197.
Pinheiro, L.E.L. 987.
Post, T.B. 285.
Potter, G.D. 27.
Prunier, A. 949.
Pursel, V.G. 87.
Putra, D.K.H. 1.

Raina, V.S. 979.
Randel, R.D. 939.
Riddell, K.P. 633.
Rivera, W. 343.
Robl, J.M. 835.
Roser, J.F. 607.
Rosol, T.J. 585.
Ross, T.T. 149.
Rowe, J.D. 921.
Rupp, G.P. 501.

Saeki, K. 211.
Sakai, M. 211.
Salem, M.H. 87.
Sasada, H. 475.
Schmidt, A.E. 623.
Schmidt, M. 139.
Schmidt-Baulain, R. 439.
Scholl, D.T. 845.
Schuken, Y.H. 845.
Seamark, R.F. 797.
Seguin, B.E. 19.
Seike, N. 211.
Selgrath, J.P. 37.
Selim, A.R. 87.
Shackell, G.H. 877.
Sharpe, K.L. 485.
Shoop, M.C. 705.
Silversides, D.W. 557.
Silvia, W.J. 871.
Singh, G. 19.
Singh, N.P. 979.
Skrzyszowska, M. 115.
Smith, J.F. 323.
Smith, R.P. 493, 537, 643, 779.
Smorag, Z. 115, 767.
Sponenberg, D.P. 263.
Spoon, R.A. 45.
Srikandakumar, A. 445.
Stahly, T.S. 557.
Stasiukynas, E. 19.

Stellflug, J.N. 995.
Stringfellow, D.A. 633.
Sullins, J.L. 705.
Sundqvist, C. 255.
Szenci, O. 667.

Takacs, E. 667.
Takakura, R. 211.
Tarasiuk, K. 335.
Taverne, M.A.M. 667.
Thompson, J.G.E. 323.
Threllfall, W.R. 585.
Tilton, J.E. 623.
Tomky, D.F. 717.
Torner, H. 767.
Townson, D.H. 197.
Turner, A.F 285.

Utaka, K. 211.

van der Lende, T. 727.
van der Meulen, J. 727.
Van Krey, H.P. 315.
van Vliet, R.A. 421.
Varner, D.D. 515, 527.
Verrinder Gibbins, A.M. 421.
Viker, S.D. 467.
Vogelsang, M.M. 95.
Vogelsang, S.G. 95.

Wagner, W.C. 653.
Wales, R.G. 323.
Walker, S.K. 797.
Wall, R.J. 243.
Walton, J.S. 421.
Watson, E.D. 913.
Weaver, L.D. 603.
Weigl, R.M. 623.
Weston, P.G. 653.
Wheaton, L.G. 493.
White, I.G. 455.
Whitmore, H.L. 493, 537.
Whittier, W.D. 693.
Wilbrink, H.J. 845.
Wilde, M.H. 675.
Williams, G.L. 969.
Williamson, P. 351.
Wilson, M.E. 577.
Woody, C.O. 675.
Woolf, A. 255.
Wright, J.M. 467.
Wright, R.W., Jr. 37,735.

Younis, A.I. 413.

Ziecik, A.J. 623.

SUBJECT INDEX VOLUME 32

13,14-dihydro-15-keto-PGF2alpha, 675,817.
5alpha-dihydrotestosterone, 871.
abortion, 683,845,929.
acetate, 323.
acid-base status, 667.
acrosome, 227.
activation, 835.
adjuvants, 557.
adrenal cortex, 205.
adrenals, 915.
age, 995.
Alhydrogel, 557.
Angora goat, 455,827.
anti-sperm antibodies, 315.
antigens, 557.
artificial insemination, 19,603.
asynchronous transfers, 1.

beef bulls, 901.
behavior, 343,949.
beta-endorphin, 493.
bioassay sperm, 69.
biopsy, 585,
biparietal diameter, 827,863.
bisected embryos of mice, 475.
bisection, 211.
blastocysts, 37.
blood gas, 667.
blood serum, 507.
boar stimulation, 949.
body fat, 27.
bovine, 19,115,185,205,211,227, 485,493,501,507,557,683, 755,767.
  embryo transfer, 633.
  embryos, 131,139.
  oocytes, 413,569.
  uterine motility,
Brahman, 285,893.
  once-daily suckling, 893.
breeding soundness, 717,901.
  evaluation, 285.
bull, 805.

calf,
  influence of, 467.
  newborn, 667.
calf, (continued)
  once-daily suckling, see Brahman
  removal of, 969.
capacitation, 413.
castration, 105.
cell losses, 115.
cervical dialation, 675.
Cervus elaphus, 877.
cesarean section, 205,667.
chromosome segregation, 987.
citric acid, 455.
cleavage rates, 139.
cloprostenol, 185,445,537.
coliform mastitis, 335.
collagen, 485.
colostrum, 501.
congenital abnormality, 805.
corpora lutea,
corpus luteum, 185,197,301,545, 787,817,871.
cow, 243,653,755,939.
  postpartum in, 537.
cryogenic,
  freezing, 735.
  freezing in straws, 359.
  frozen semen, 359, 369, 385.
  preservation, 131,369, 385,439.
  protectants, 735.
culture, 323,797.
cyclic AMP, 87.

dairy herd reproduction, 693.
day length, 995.
days open, 845.
demi-embryo, 211.
dexamethasone, 79,653.
Didelphis virginiana, 817.
dimethyl dioctadecyl ammonium bromide, 557.
dimethyl sulfoxide, 263.
dipstick ELISA, 607.
DNA injection, 243.
DNA probes, 421.
dog, 585.
dystocia, 205.

early embryonic death, 603.
electric stimulus, 569.
electrical pulse, 835.
electrofusion, 159.
ELISA, 315.
embryo, 37,115,123,243,323,421, 623,735.
  bisection, 115.
  collection of, 727.
    transcervical, 727.
  culture, 885.
  development, 139.
  nonsurgical collection, 123.
  recovery, 877.
  sexing, 421.
  tetraploid, 159.
  transfer, 1,211.
  washing, 131.
endometrial biopsy, 263,451.
endometritis, 351.
endometrium, 817.
endotoxins, 335.
epidural, 779.
epithelial cells, 507.
equine, 197,263,515.
  chorionic gonadotropin, 607.
  conceptus, 401.
estradiol, 623,913.
  benzoate treatment, 185.
  cypionate, 537.
estrogen, 577,653.
estrone, 949.
  sulfate, 1.
estrous cycle, 451,675.
  behavior, 343.
estrus, 27, 745,929,1007.
  detection, 603,745.
  synchronization, 185,301,705, 717,745,921.
  unobserved, 693.
ewe lamb, 55.

farrowing rate, 961.,
  progesterone-delayed, 577.
fenprostalene, 537,755.
fertility, 27,69,359,369,385,515, 845.
  rate of, 767.
fertility (continued)
  turkey, 315.
fetal placental tissue, 653.
fetus, 827,863.
Finn sheep, 863.
flehmen, 343.
fluorogestone sponge, 921.
foaling, 221.
follicles, 787.
  subordinate, 787.
follicle stimulating hormone, 877.
freezing, see cryogenics.
fructose, 455.
Freund's complete adjuvant, 557.

gestation, 863.
  age of, 827.
gilts, 445,623,949.
glucose, 37,323.
glycerylphosphorylcholine, 455.
goat, 69,331,455,545,827,921,1007.
  Angora, 455,827.
  Nubian, 827.
gonadotropin, 939,969.
gonadotropin releasing hormone, 79,105,557,969.
gonadotropin releasing hormone immunization, 557.
growth in ewe lambs, 55.
growth hormone, 45.
growth response, 45.

Havlogen, 557.
hCG, 623, 929.
heifer, 939.
HEPES, 797.
heterospermic insemination, 385.
histopathy, 585.
human chorionic gonadotropin, 185,359,623.
hybrid fertility, 987.
hypoplasia, 805.

imidazole, 87.
immunoglobins, 501.
impotence, 805.
impotentia coeundi, 805.
in vitro, 227.

in vitro (continued)
fertilization, 413,767.
maturation, 413.
in vivo culture, 243.
induction of parturition, 501.
inseminations per conception, 845.
insulin, 45.
intravaginal pressure, 221.
intramammary infection, 507.
intraovarian relationships, 787.
intrauterine, 263.
ionophore, 227.

lactation, 55.
LAL test, 335.
laparoscopy, 413.
libido, 717,901.
lidocaine, 779.
limulus amebocyte lysate, 335.
litter size, 961.
luprostiol, 11.
luteal,
cysts, 693,
function, 675,
lifespan, 871.
phase, 301.
luteinizing hormone, 79,105,149, 1007.
luteolysis, 331.
luteolytic, 755.
lysomal enzyme, 507.

mammary,
development of, 55.
infection of, 507.
mastectomy, 467.
mastitus, 335.
mare, 27,95 197,221,451,527,607, 643,675,913.
obesity, 27.
ultrasound in, 95.
Marmota monax, 255.
mastectomy, 467.
mastitus, 335.
melatonin implant, 995,
milk production,
milk yield,
morphometric analysis,
motility,
mouse, 115,475,735.
bisected embryos, 475.
postnatal growth, 475.
embryos, 159.
oocyte, 835.
multiple sire mating, 285.
mycoplasma bovigenitalium, 633.
mycoplasma bovis, 633.
mycoplasma mycoides, 683.
myometrial activity, 537.
myometrial contractility, 493.

NAGase, 507.
naloxone, 493.
newborn calves, 667.
nonsurgical collection, 123.
norgestomet, 969.
implant, 921.
Nubian goat, 827.
nutrition,
effects, 149.

once-daily suckling, 893.
oocytes, 735,767.
activation of, 835.
oppossum, 817.
parturition in, 817.
organ culture, 885.
ovary, 787,817.
intraovarian, 787.
oviducts,
in rabbits, 243.
synthetic fluid medium, 797.
trauma of, 315.
ovulation, 149,445.
interval of, 451.
oxytocin, 277,643,755,1007.

parthenogenetic activation, 569.
parturition, 11,817.
induced of, 11.
penis, 805.
perineal analgesia, 779.
pig, 1, 79,727,885.
placenta, 485, 653.
placentomes, 485.
plasma eCG, 607.

PMSG, 929.
porcine, 37,105.
  organ culture, 885.
postnatal growth, 475.
postpartum, 27, 205,277,643,755.
  cow, 537.
  interval, 467,893.
  ovulation, 467.
  period of, 507,527.
postweaning breeding, 961.
pregnancy, 221,331,939.
  rate of, 19,603,969.
primiparous cows, 893.
progesterone, 11,149,197,545,577, 623,653,675,871,913.
  testing of, 603.
programmable freezer, 359.
prolactin, 45.
pronuclei, 243.
prostaglandin, 445,577.
  F, 817.
  F2alpha, 11,277,301,537, 693,745.
puberty, 55,171,949.
puerperium, 507.
pyometra, 693.

rabbit oviducts, 243.
Rainbow trout, 439.
ram, 87.
real-time ultrasonic, 863,
Red deer, 877.
Regressin, 557.
releasing hormone, 105.
reproduction, 995.
  history, 351.
  performance, 95.
retained placenta, 845.
retention, 485.
RIA, 607.
Ribi adjuvant, 557.
riboflavin, 455.
RNA synthesis, 87.

Salmo gairdneri, 439.
scrotal circumference, 171.
seasonal breeder, 255.
semen, 439,455.
semen (continued)
  assays, 369.
  placement, 19.
  quality, 369,385.
  storage, 515.
serum, 507.
services per conception, 55.
serving capacity, 901.
sexing, 139.
  methods, 421.
sheep, 45,115,149,323,863,995.
  Suffolk, 863.
  X goat hybrids, 987.
single-sire mating, 705.
site of insemination, 19.
sperm, 69,87,227,515.
  metabolic activity, 87.
spermatogenesis, 171,255.
stallion, 515.
steroids, 939.
  synthesis of, 653.
stillbirths, 577.
stress, 205.
subordinate follicles, 787.
Suffolk sheep, 863.
superovulation, 877.
Swamp buffalo, 117.
swine, 11,123,359,369,577,929.
syncro-mate-B in Zebu cattle, 745.
synthetic oviduct fluid medium,

testicle, 255,585.
  biopsy of, 585.
testosterone, 79,255,285,331,871, 913.
  secretion of, 331.
tetraploid embryos, 159.
transcervical collection, 727.
triiodothyronine, 87.
trophoblastic vesicle, 37.
  culture of, 401.
trypanosomiasis, 545.
trypsin treatment, 131.
turkey fertility, 315.
twin, 211.
twinning, 845.

ultrasound in mares, 95.

urine eCG, 607.
uterine,
    aspirates, 507,
    biopsy, 351.
    fluid, 507.
    infection, 277,351.
      intrauterine, 263.
    involution, 527.
    lavage, 527.
    leucocytes, 507.
    motility, 493,643,755.
    resection, 727.
uterus, 123.

vaginal,
    conductivity, 961.
    pressure, 221.

woodchuck, 255.

xylazine, 779.

Zebu cattle, 745.
    estrus synchronization of, 745.
    with syncro-mate-B, 745.
zona hardening, 767.
zona pellucida, 211.
zona-free hamster egg, 69.
zona-free hamster oocytes, 227.
zygote, 797.